Cogongrass (*Imperata cylindrica*)

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Plant Notes provide technical information on plant materials and related topics for use by NRCS conservationist, cooperators, and land owners and managers.

Where To Get Help

For more information about invasive species contact your local Natural Resources Conservation Service

Cogongrass is an invasive noxious grass that spreads by aggressive underground rhizomes and light fluffy seed. Unchecked this grass will completely dominate and displace desired species. The scientific name for Cogongrass is ***Imperata cylindrica*** however, there are several common names including Japanese bloodgrass, japgrass, or spear grass. No matter what name is used; this grass has caused environmental and economic damage in Alabama, Florida, Mississippi and now Louisiana.


Larry Allain, USGS

Cogongrass was accidentally introduced through Mobile Bay in the early 1900's as packing material for produce. It was purposely introduced across the southern United States as an erosion control and forage crop. Cogongrass is a poor forage with very low protein content and high silica levels. Extremely sharp leaves can also injure the mouths of grazing animals. Today, cogongrass continues to be sold in the ornamental nursery trade as Japanese bloodgrass or 'Red Baron' bloodgrass.


Larry Allain, USGS

Cogongrass usually occurs in non-cultivated sites, including pastures, fallow fields, forests, parks, highway and railroad rights-of-way. It grows in full sun to partial shade and is tolerant of high salinity and drought. It prefers sandy soils with low nutrient levels but it can move into more fertile sites. Large infestations of cogongrass can alter the normal fire regime of a fire-driven ecosystem by causing more frequent and intense fires that injure or destroy native plants.

Cogongrass is easily confused with the native grass silver bluestem ***Bothriochloa saccharoides*** (Sw.). However, silver bluestem forms smaller clumps instead of dense stands and it flowers in the fall of the year. Cogongrass flowers at the beginning of the growing season from March to May. However, it can flower throughout the growing season following fire, mowing, tillage or other disturbance. One unique characteristic for identification is the offset midrib in the leaf. The midrib is closer to one leaf margin.

Cogongrass Control

NRCS

Cogongrass will not persist in frequently cultivated areas, but once established it is difficult to eliminate. Mowing or burning removes above ground vegetation, which opens the plant canopy for emergence of seedlings and new stems from rhizomes. Although single mechanical treatments are not effective, sequential combinations of mechanical and chemical treatments applied in a persistent manner can eliminate a cogongrass infestation.

Mowing or burning the existing vegetation in late fall or early spring will remove the dense vegetation and thatch layer facilitating chemical application. Once vegetation recovers from the mechanical treatment (6 inches re-growth), apply one of the herbicides listed in Table 1. Research has shown that the best results are obtained with a tank mix of glyphosate and imazapyr (Table 2). If mowing or burning are not possible, then apply the herbicide alone. It is unlikely that these initial treatments will eliminate cogongrass, so subsequent spot spraying with glyphosate will be necessary.

Glyphosate and imazapyr are non-selective herbicides that may damage nearby desirable vegetation. Imazapyr has soil activity with a half-life of 30 days, so delay any re-vegetation effort for 3 months after application. Read and follow all label requirements when applying these herbicides.

Mention of herbicides by name does not constitute endorsement of any material by the Natural Resources Conservation Service.

Reference Material:

Byrd, J. D. and C. T. Bryson. 1999. Biology, Ecology, and Control of Cogongrass [Imperata cylindrica (L.) Beauv.] Fact Sheet No. 1999-01. Mississippi Department of Agriculture and Commerce, Bureau of Plant Industry.

Johnson, E. R, and D. G. Shilling, 1998. Cogon grass Fact sheet. Plant Conservation Alliance, Alien Plant Working Group. University of Florida, Weed Science Department.

Table 1. Herbicide products labeled for congongrass suppression.

Products	Rate Broadcast	Rate Backpack
	qt. / acre	% solution
Glyphosate Formulations		
Dow AgroSciences LLD		
Accord Concentrate	4.5 to 7.5	2.0%
Accord SP	3 to 5	2.0%
E.I. duPont Nemours & Co., Inc.		
Glyphosate	1.5 to 3.5	1.5%
DuPont Glyphosate VMF	3 to 5	3.0%
Monsanto Company		
Roundup Original	3 to 5	1.5%
Roundup Custom	4.5 to 7.5	1.5%
Roundup Pro	3 to 5	2.0%
Roundup Pro Concentrate	2.5 to 4	1.6%
Roundup Ultra Max	2.5 to 4	1.6%
Roundup Weather Max	2 to 3.3	1.5%
Imazapyr Formulations		
BASF Specialty Products		
Arsenal Herbicide	2 to 3	2.0%
Arsenal AC Herbicide	1	2.0%
Chopper Herbicide	1.5	2.0%

Table 2. Herbicide spray mixtures for cogongrass supression.

Tank Mix	Herbicide Volume	Water Volume	Surfactant Volume
1 gallon spray solution			
Roundup Original (2%)	2.7 oz	123 oz	1.3 oz
Arsenal AC (2%)	1.3 oz		
30 GPA for 1 acre			
Roundup Original (4 qt./acre)	128 oz	28.62 gal.	39 oz
Arsenal AC (1 pt./acre)	16 oz		

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